Yixiu Wang

List of Publications by Year
in descending order

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30 papers	2,400 citations	331670 21 h-index	580821 25 g-index
30 all docs	30 docs citations	30 times ranked	2550 citing authors

#	Article	IF	Citations
1	Field-effect transistors made from solution-grown two-dimensional tellurene. Nature Electronics, 2018, 1, 228-236.	26.0	591
2	One-Dimensional van der Waals Material Tellurium: Raman Spectroscopy under Strain and Magneto-Transport. Nano Letters, 2017, 17, 3965-3973.	9.1	272
3	Stable mid-infrared polarization imaging based on quasi-2D tellurium at room temperature. Nature Communications, 2020, 11, 2308.	12.8	259
4	Tellurene: its physical properties, scalable nanomanufacturing, and device applications. Chemical Society Reviews, 2018, 47, 7203-7212.	38.1	214
5	Raman response and transport properties of tellurium atomic chains encapsulated in nanotubes. Nature Electronics, 2020, 3, 141-147.	26.0	126
6	Tellurene Photodetector with High Gain and Wide Bandwidth. ACS Nano, 2020, 14, 303-310.	14.6	101
7	Largeâ€Area Direct Laserâ€Shock Imprinting of a 3D Biomimic Hierarchical Metal Surface for Triboelectric Nanogenerators. Advanced Materials, 2018, 30, 1705840.	21.0	93
8	Thermoelectric Performance of 2D Tellurium with Accumulation Contacts. Nano Letters, 2019, 19, 1955-1962.	9.1	81
9	Solution-synthesized chiral piezoelectric selenium nanowires for wearable self-powered human-integrated monitoring. Nano Energy, 2019, 56, 693-699.	16.0	71
10	Quantum Hall effect of Weyl fermions in n-type semiconducting tellurene. Nature Nanotechnology, 2020, 15, 585-591.	31.5	63
11	Quantum Transport and Band Structure Evolution under High Magnetic Field in Few-Layer Tellurene. Nano Letters, 2018, 18, 5760-5767.	9.1	60
12	Tellurene: A Multifunctional Material for Midinfrared Optoelectronics. ACS Photonics, 2019, 6, 1632-1638.	6.6	60
13	Wearable high-dielectric-constant polymers with coreâ€“shell liquid metal inclusions for biomechanical energy harvesting and a self-powered user interface. Journal of Materials Chemistry A, 2019, 7, 7109-7117.	10.3	48
14	Chitosan biopolymerâ€derived selfâ€powered triboelectric sensor with optimized performance through molecular surface engineering and dataâ€driven learning. InformaÄnÃ-MateriÃ¡ly, 2019, 1, 116-125.	17.3	47
15	Data-driven and probabilistic learning of the process-structure-property relationship in solution-grown tellurene for optimized nanomanufacturing of high-performance nanoelectronics. Nano Energy, 2019, 57, 480-491.	16.0	44
16	Strainâ€Engineered Anisotropic Optical and Electrical Properties in 2D Chiralâ€Chain Tellurium. Advanced Materials, 2020, 32, e2002342.	21.0	40
17	Anisotropic thermal conductivity in 2D tellurium. 2D Materials, 2020, 7, 015008.	4.4	39
18	The resurrection of tellurium as an elemental two-dimensional semiconductor. Npj 2D Materials and Applications, 2022, 6, .	7.9	36

#	Article	IF	Citations
19	Piezotronic effect in 1D van der Waals solid of elemental tellurium nanobelt for smart adaptive electronics. Semiconductor Science and Technology, 2017, 32, 104004.	2.0	32
20	Imaging Carrier Inhomogeneities in Ambipolar Tellurene Field Effect Transistors. Nano Letters, 2019, 19, 1289-1294.	9.1	31
21	Gate-tunable strong spin-orbit interaction in two-dimensional tellurium probed by weak antilocalization. Physical Review B, 2020, 101, .	3.2	29
22	High-Performance Few-Layer Tellurium CMOS Devices Enabled by Atomic Layer Deposited Dielectric Doping Technique. , 2018, , .		16
23	Scalable nanomanufacturing and assembly of chiral-chain piezoelectric tellurium nanowires for wearable self-powered cardiovascular monitoring. Nano Futures, 2019, 3, 011001.	2.2	16
24	Infrared ultrafast spectroscopy of solution-grown thin film tellurium. Physical Review B, 2019, 100, .	3.2	13
25	Parallel Nanoimprint Forming of One-Dimensional Chiral Semiconductor for Strain-Engineered Optical Properties. Nano-Micro Letters, 2020, 12, 160.	27.0	8
26	Bilayer Quantum Hall States in an n-Type Wide Tellurium Quantum Well. Nano Letters, 2021, 21, 7527-7533.	9.1	6
27	Wafer-scale Material-device Correlation of Tellurene MOSFETs. , 2018, , .		2
28	Selenene and Tellurene. , 2022, , 197-224.		2
29	Microscopic origin of inhomogeneous transport in four-terminal tellurene devices. Applied Physics Letters, 2020, 117, .	3.3	0
30	High-Frequency Tellurene MOSFETs with Biased Contacts. , 2021, , .		0